

# HSC Software Descriptions

## **Cross Sectional Anatomy Tutor** (Accessible via HSC-Student Domain Server only)

The Cross Sectional Anatomy Tutor was designed to develop a student's ability to recognize anatomic structures using CT and MR images from cross sections of a human body. Anatomical structures are highlighted and labeled in the tutorial. Clinical case studies and on-line tests are available and the program provides a review for missed test questions.

**NOTE:** An error message will appear when you launch this program, stating "This program is optimized to run full screen at a 640 x 480 pixel resolution. Use the Windows setup program to change the resolution." Please click **OK**.

## **Embryo Images** (Accessible via HSC-Student Domain Server and Web Apps)

Embryo Images is a tutorial that uses scanning electron micrographs of mammalian embryos to teach embryogenesis. The tutorial concentrates on embryogenesis from weeks 3-8 post fertilization in the human. Colored and animated overlays are incorporated to aid in identification of anatomical structures.

## **Heart Sounds** (Accessible via HSC-Student Domain Server and Web Apps)

The Unique Interactive Guide to Cardiac Diagnosis is a guide to cardiac diagnosis integrating heart sounds and images. Featuring 200 heart sounds, 100 images, 135 clinical cases and a catalog of lesions. Its contents includes: General Tutorials, Timing of Heart Sounds, Timing of Murmurs, and Catalog of Lesions.

## **Histology Lab Assistant** (Accessible via HSC-Student Domain Server and Web Apps)

The Histology Lab Assistant is tutorial software dealing with the histological structures of the human body. This application is divided into three sections: the atlas, workbook, and test. The atlas contains slides of labeled images along with detailed information related to the image. The workbook contains the same slides, but the student is asked to locate specific structures on an image. The test section contains review questions. Answers and explanations of those answers are available.

## **Human Anatomy** (Accessible locally on all machines and via Web Apps)

Human Anatomy is a tutorial that offers a series of laboratories categorized by body section. Pictures of human cadavers and MR images are employed throughout this tutorial. Each lab has four sections: Overview, Osteology, Laboratory Dissection Procedures, and Summary Terms. Quizzes are included for review and may be chosen by topic.

## **Imaging Atlas of Human Anatomy** (Accessible via HSC-Student Domain Server and Web Apps)

The Imaging Atlas of Human Anatomy is tutorial software designed for radiology students. This tutorial is based on radiographic images of normal human anatomy, including magnetic resonance angiography and ultrasound video sequences. Anatomical structures are highlighted and labeled. The software allows for keyword searches and viewing of thumbnails of groups of pictures and image sites.

**NOTE:** When accessed through HSC-Student Domain Server, the color settings must be changed in order to run this program. Please refer to the **Changing Color Settings in Order to Run Imaging Atlas of Human Anatomy** directions, in the **Accessing HSC Software Via the HSC-Student Domain Server** document, located in the **Reference Software** section of this manual. The color settings do not need to be changed when this software is accessed through Web Apps.

**Interactive Atlas of Human Anatomy (Netter's)** (Accessible via HSC-Student Domain Server and Web Apps)

The Interactive Atlas of Human Anatomy (Netter's) contains drawings, referred to as plates, of organs and the skeletal, muscular and nervous systems. The study guide allows you to save specific plates, labels, text, and audio notes to a personal study guide file. For review purposes, there are computer generated practice tests, as well as the ability to create user-customized exams.

**Interactive Brain Atlas** (Accessible via HSC-Student Domain Server and Web Apps)

Interactive Brain Atlas is a multimedia anatomy instructional aid. Photographs of brain tissue sections are utilized along with MRI scans and 3-D animation. Anatomical regions of the brain are outlined and labeled. Quizzes are available for review purposes.

**JMP** (Accessible via HSC-Student Domain Server and Web Apps)

JMP is a Statistical Discovery Software which links statistics with graphics to explore data, make discoveries, and gain knowledge for better decision-making. It integrates presentation graphing and statistics in one package to streamline analysis and document submission. The program combines Graphics and Presentation, Data and File Management, Basic Descriptive Statistics and it, its own JMP Scripting Language (JSL). It also features a Formula Editor, Linear Models, Correlations & Multivariate, it can be used to aid in the Design of Experiments create Statistical Quality Control & Variability Charts, work with Time Series and calculate Survival Analysis.

**MacBrain Lesion** (Accessible via HSC-Student Domain Server and Web Apps)

MacBrain Lesion was designed to develop a student's ability to diagnose brain lesions. Computerized file cards contain information and diagrams of different neural pathways. Examples of lesion problems, along with possible symptoms, lesion sites, and pathway diagrams are included. Quizzes, related to the different lesion sites are available for review purposes.

**Merck Manual** (Accessible via HSC-Student Domain Server and Web Apps)

The Merck Manual is a collection of medical journal articles. The articles are grouped by subject in two volumes, The Merck Manual and The Merck Manual of Geriatrics.

**Neuroanatomy Interactive Syllabus** (Accessible via HSC-Student Domain Server and Web Apps)

Neuroanatomy Interactive Syllabus was designed to develop a student's ability to identify structures of the human central nervous system. Topics are organized into chapters. Labeled images, descriptions, animated 3-D and MR images are all available in this tutorial. Quizzes are available for review purposes.

**Parasite Tutor** (Accessible via HSC-Student Domain Server and Web Apps)

Parasite-Tutor teaches the laboratory identification of clinically significant Parasites. It is a 90-minute, interactive computer program that provides initial instruction, continuing education and competency

assessment. Coverage begins with a comprehensive overview, and includes: Blood Parasites -- Diagnostic techniques for detection, intracellular parasites, extracellular parasites, common artifacts that can be confused with blood parasites; Stool Parasites -- Diagnostic techniques, Protozoa, Helminths, common artifacts; Parasites from other sites, such as eyes, CSF, genitalia, skin, and urinary tract. An image index makes location easy; and a final exam made up of two separate tests provides detailed feedback.

**Reference Manager** (Accessible via HSC-Student Domain Server and Web Apps)

A bibliographic software program for researchers which is used to organize and generate references, create and organize research notes, manage tasks and organize a research To Do list. It automatically generates a Reference ID for each item and allows the user to import and export references to and from text files. The program integrates with MS Word and WordPerfect to generate citations and a bibliography in APA, MLA, and a variety of other common style formats.

**Tract Finder 2.0** (Accessible via HSC-Student Domain Server only)

Tract Finder 2.0 was designed to develop a student's ability to recognize and trace major neuroanatomical pathways through stained sections of various levels of the human central nervous system. Pathways are highlighted and labeled in the tutorial. Functional descriptions are given for each pathway.